A Report of the TB Qualitative Study

Communication for Development Foundation Uganda CDFU

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ABBREVIATIONS/ACRONYMS

BCC	Behaviour Change Communication
CDFU	Communication for Development Foundation Uganda
CHW	Community Health Worker
DDHS	District Director of Health Services
DOTS	Directly Observed Therapy Short-course
DTB&LC	District TB & Leprosy Coordinator
GoU	Government of Uganda
HIV	Human-Immuno Deficiency Virus
IEC	Information Education & Communication
LC	Local Council
MOH	Ministry of Health
MSH	Management Sciences for Health
NTLP	National Tuberculosis and Leprosy Programme
RA	Research Assistant
RFP	Request for Proposal
TB	Tuberculosis
UBOS	Uganda Bureau of Statistics
WHO	World Health Organisation

EXECUTIVE SUMMARY

AA. Introduction

Uganda established a national Tuberculosis (TB) control program way back in 1965 in an effort to control TB. The Ministry of Health (MOH) in conjunction with Management Sciences for Health (MSH) commissioned a TB qualitative study in 10 districts.

The study's main aim was to gather information to be used as basis for developing a communication strategy for effective control of TB by focusing on improvements in: 1) Case detection, 2) Treatment successes, and 3) DOTS coverage. The study therefore looked at a variety of factors including motivation, cultural, economic, and other societal attitudes that influence treatment seeking behaviours at household, community and institutional levels.

BB. Methodology

The approaches basically entailed qualitative methods of data collection through a combination of interviews the administration of questionnaires to TB patients, health workers and community volunteers in ten districts of Apac, Arua, Hoima, Kampala, Kiboga, Kyenjojo, Mbale, Mukono, Rakai and Soroti.

CC. Findings

The study examined the levels of knowledge, attitudes and practices about Tuberculosis in regard to treatment and information, education and communication (IEC) of the TB patients, households, communities, health workers and volunteers.

a) Characteristics of the Surveyed Population

In total 331 TB patients, 92 volunteers and 97 health workers were covered of whom 56% of the TB respondents were males. The mean age of TB patients was 34 years while that of the volunteers was 37 years and most of the household heads were literate having completed Primary education (Primary 7) or other higher level.

b) Knowledge about Tuberculosis

Generally, most respondents were knowledgeable and aware about the major causes of TB, case finding and detection. It was found out that most TB patients had good knowledge about the mode of TB spread. The volunteers were also able to identify the common myths and misconceptions about TB spread. On their part, the communities exhibited a fair knowledge and understanding of TB spread with most mentioning airborne transmission.

Findings indicate that health workers were the major source of information on TB spread, signs/symptoms and treatment for the TB patients and volunteers. Further analysis indicates that health workers and volunteers were conversant with TB signs and symptoms though there was a general acknowledgement about various problems that hinder case detection at both health centre and community level (*with lack of equipment as the most identified problem followed by lack of trained personnel, little information, poor facilitation).*

It is worth noting that the problems mentioned are only contributing factors to the main problem that calls for re-organizing the health delivery system at health facility level.

The study further found out that current approaches on TB case detection emphasised education and sensitization and called for an increased investment in health infrastructure.

c) Knowledge of Treatment

The survey also examined the knowledge levels of: 1) TB patients, 2) Volunteers and 3) health workers with regard to treatment. Findings show that most TB patients were rather knowledgeable on TB treatment and other curative measures (*with 86.3% for consistent taking of drugs, 9.1% advocating for periodical testing and 1.7% for following instructions).*

Findings further indicate that 54 health workers had undertaken TB related training with 84.8% saying the refresher courses had helped them improve their knowledge especially with regards to i) DOTS and its application, and ii) improving case treatment.

d) Information, Education and Communication (IEC):

1) The current sources of information

Findings generally indicate that health workers were the most mentioned as a source of information on TB. Other sources of information were printed materials, Radio and meetings. Recommended channels included: places of worship, health education and drama groups.

2) The effectiveness of the current sources

Findings further indicate that most respondents (66%) were of the view that health workers were most useful and effective in drug administration and 37.25 thought they were effective in advising how to take drugs. On the other hand, 42% thought volunteers were effective in assisting TB patients' compliance to take drugs.

3) The preferred channels of information.

The study found out that generally, health workers were the most preferred medium for channeling information about TB. TB patients recommended sensitization, community meetings and Radio programmes. Similarly, the volunteers highly recommended training and sensitization.

DD. Conclusions

Based on the survey findings, several conclusions were made.

- Knowledge levels on TB and TB management were still quite low.
- The effectiveness and knowledge of the health workers and volunteers was seriously minimized by lack of appropriate training.
- There was a pronounced need to equip the health workers with adequate and relevant information on TB management if the DOTS was to be effective.
- There was need to ensure and promote sustainability through
  - Increased political will and commitment which is vital for the provision of resources and leverage.
  - Recruitment of more staff
  - Training of more staff (health workers and staff)
  - Increased facilitation
  - Re-orientation of health staff on national and WHO guidelines
  - Increased collaboration between government (central and local) and the private health service providers.
- Increased government support and investment in diagnostic and testing facilities to ensure quality of services at health units.

EE. Recommendations

Some recommendations for improved information flow were made.

- Design an effective IEC strategy that will guide the implementation of the DOTS programme: improve case detection and treatment.
- Increase community sensitization and awareness efforts about TB symptoms and cure.
- Improve supervision and monitoring of the service delivery system.
- Recruitment and training of health staff in TB management.

1.0 INTRODUCTION AND BACKGROUND

Uganda is among the 22 high-burden countries for Tuberculosis (TB). TB is among the diseases responsible for the largest proportion of morbidity and mortality in Uganda, the country has been badly hit by the rapid spread of TB. Efforts to control TB in the country started way back in 1965 when a National Tuberculosis Control Program was established. A combined programme for TB and Leprosy was conceived in 1988 and the National TB and Leprosy programme started in 1990. Regardless of these efforts, the disease has continued to be a threat given the high incidence of TB cases.

The National Tuberculosis and Leprosy Program's (NTLP's) TB objectives are to reach a 70% case detection rate and an 85% treatment success rate by 2005. The Ministry of Health (MOH) administratively divides the country into nine zones for TB control. A zonal TB leprosy supervisor heads each of the zones. Each of the 56 districts has a TB/Leprosy officer. Diagnosis of TB cases by sputum smear microscopy takes place at the hospitals and health centre IV units.

In 1997, the NTLP adopted the WHO Directly Observed Therapy Short-course (DOTS) strategy aimed at ensuring high cure rates of TB patients, rapidly decreasing the spread of the disease and preventing emergence of multi-drug resistant tuberculosis. The community based DOTS, with the important participation of community health volunteers, is an innovative approach for improving DOTS coverage and quality. The NTLP has carried out significant advances in the public health services through case- finding and efficiency of the TB treatment with strong community support.

Despite the great progress by NTLP in the implementation of its community based DOTS program, the case detection rate (53%) and treatment success rate (65%) are below the target as shown in Figure 1 below.

Figure 1 showing Uganda TB data

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Note: It takes a year to report on the treatment outcome of those started on anti-TB treatment. Therefore, the treatment outcome of the 2004 cohort will be known next year.

Management Sciences for Health's (MSH's) Management and Leadership Program subcontracted Communication for Development Foundation Uganda (CDFU) to work with the Ministry of Health, Health Education & Promotion Unit and the National Tuberculosis and Leprosy Program (NTLP), as well as other stakeholders to develop and implement and IEC/BCC strategy for TB control in Uganda.

The main objective of developing a TB strategy is to control the prevalence of TB. It has been observed that TB/ HIV activities have not been streamlined in TB. CDFU will develop a strategy that will contribute to improvements in:

- **Case detection**
- **Treatment success**
- **DOTS coverage**

In order to develop a communication strategy that is effective, it is vital to collect background information and research on the very behaviour you are trying to change. The research helps to discern motivational factors, cultural, economic and societal implications of the behavior that is being influenced. CDFU conducted a literature review and found there were some gaps to be filled by conducting research. The review established that there was little documentation about TB activities in Uganda. As such, the qualitative research would address issues such as knowledge, practices and attitudes of patients, the community and health workers concerning health-seeking behaviour, diagnosis and treatment as well as the causes of delay at various levels. The Research focused on three key TB control areas: case detection, treatment success and DOTS coverage

1.2 Purpose of the Study

The main purpose was to conduct a detailed qualitative study on factors influencing treatment seeking behaviour, and health worker, TB patient,

household and community perceptions in relation to Tuberculosis Control in Uganda.

Specifically, the Consultant was to carry out the survey to;

i. Establish household and community knowledge, attitudes, beliefs and practices in relation to TB case detection & treatment; identify barriers to behaviour change,
ii. Establish health workers' knowledge, attitudes and practices towards TB control,
iii. Establish the role of community leaders i.e. (religious, cultural, opinion and political leaders) in TB control,
iv. Identify existing channels, sources and mechanisms of communication and access to information about TB control,
v. Highlight key areas of focus to be addressed by the communication strategy,
vi. Recommend appropriate channels of disseminating information about TB.

(Detailed Terms of reference (TORs) are provided in Appendix 1)

The study outcomes would therefore provide an input for the communication strategy in two main areas:

1. Provide background information on which to base the strategy
2. Outline key problems to address through communication

It is hoped that the strategy developed will contribute to improvements in:

- ✓ Case detection
- ✓ Treatment success
- ✓ DOTS coverage
- ✓

1.3 Scope of the Survey

The survey targeted selected districts of Kampala, Mukono and Kiboga in Central region; Apac & Arua in Northern region; Rakai in Southwestern region; Kyenjojo & Hoima in Western region and Mbale & Soroti in Eastern region. The survey covered 10 counties and 20 sub-counties from each of the 10 districts and targeted 732 TB patients, 100 volunteers and 100 health

workers. The districts were selected based on the available data of the national surveillance of TB Case Detection and Treatment Success levels. The survey also targeted key informants at the district level and involved a maximum of 2 focus group discussions in each of the 10 districts whose composition included volunteers, members from the patients' families, community leaders, religious leaders, LC I secretary for health, LC II chairman or representative, recovered patient and a neighbour to the patient. (*See* ***Appendix 2****for Sample and Coverage)*

2.0 METHODOLOGY

The methodology and design to the study took into account a prolonged approach format that formed the basis for the Consultant and client to evaluate the extent to which the exercise has met the study objectives.

The researchers used 3 methods: 1) semi-structured questionnaires for TB patients, health workers, and volunteers, 2) key informant interviews, and 3) focus group discussions, the latter two of which targeted various stakeholders at the districts and in the communities. At the district level, relevant departmental heads such as the District Director for Health Services (DDHS), the District TB & Leprosy Coordinator, the District Health Coordinator, and the LC V Secretary for Health Services were targeted. The research teams further targeted Health workers at the health facilities and the volunteers providing the services. At the community level, FGDs composed of a member from the patients' families, community leaders, religious leaders LCI Secretary for Health, LCII C/man or representative, recovered patient and neighbour were carried out.

2.1 SAMPLE SIZE AND SAMPLING PROCEDURES

The consultant scientifically chose a sample in order to have equitably distributed representation of the various districts. In so doing, the Consultant increased the power and scientific rigour of the study, by choosing the sample size of each district as follows:

$$(N1/N * n) = n1,$$

where;

N - Entire Population size of all 10 districts

N1 - Population size from each district

n1 - Population Sub – Sample from each district

n - Entire Population Sample selected from all districts.

Table 1 shows the Case Detection Rate (CDR) population figures for the 10 districts[1]. From these figures, a corresponding study sample was selected for each district using proportionate sampling method - a technique used because of the need to have a representative sample in accordance with the population size of each district.

The entire sample size for the ten (10) districts was derived scientifically and **Table 1** below shows the population distribution and study samples selected in accordance with CDR size of each district.

Table 1. Proportional Distribution of Samples Showing Summary Case Detection Rates (CDR) for TB Cases per District for 2004

	2004 CASE FINDING DATA BY ZONE BY DISTRICT					
	District TB Cases					
	District	**New**	**M+PTB**	**% CDR**	**Sampled CDR**	**Final CDR figure**
1	Apac	556	51.30%	955	64.2	64
2	Arua	538	39.20%	870	58.4	59
3	Kampala	3515	184.20%	10,508	705.9	706
4	Kiboga	148	39.80%	219	14.7	15
5	Mukono	574	44.30%	1,111	74.6	75
6	Kyenjojo	221	36.20%	512	34.4	35
7	Hoima	245	43.70%	405	27.2	27
8	Rakai	506	66.90%	665	44.7	45
9	Soroti	337	56.50%	748	50.3	50
10	Mbale	676	58.50%	1,154	77.5	76
	Total	**7,316**		**17,147**		**1152**

Using the Uganda Bureau of Statistics (UBOS) data, the Consultant was able to generate a sampling frame of counties from the list of ten districts to be visited. Each county had an equal chance of selection. The sample selection up-to sub-county to visit was done in Kampala. Information about the population size and name of sub-counties has been obtained from Uganda Bureaus of Statistics (UBOS) Entebbe.

The consultant selected one county per district from which two sub-counties were selected[2]. Both the county and sub-county selection were random in

[1] As per additional information from The New vision Supplement on World TB day of Thursday March 24, 2005.

[2] The Consultant selected two sub-counties in every county mainly for two reasons:

nature. Table 2 below shows the list of counties/divisions from the 10 districts.

Table 2: Showing the randomly selected Counties/Divisions

Region	District	Selected Counties /Divisions
Central	Kampala	Kawempe
	Kiboga	Kiboga
	Mukono	Nakifuma
South-West	Rakai	Kyotera
Western	Hoima	Bugahya
	Kyenjojo	Kyaka
Eastern	Mbale	Bunghoko
	Soroti	Soroti Municipality
Northern	Apac	Oyam
	Arua	Terego

2.2 DATA COLLECTION

Field data collection was conducted by a team of 20 research assistants (9 females and 11 males) with 10 district supervisors. The team underwent a two days' training that included pre-testing of the research instruments/tools before field work.

Altogether, the survey targeted 1152 respondents as summarized below:

Table 3: Summary Description of the Sample Selection Process:

	Districts	Counties	Sub-Counties	Respondents
Consideration			2 Sub-counties per district	- patients still on drugs - patients who finished the course - FGDs - Key Informants at districts - Health workers & volunteers
Number	**10**	**10**	**20**	**1,152**

2.2.1 Sources of Data

Data was collected from the following sources:

a) there are instances where counties are quite large and would therefore defeat the very idea of sampling
b) There are no fundamental differences between the sub-county and counties in as far as service provision is concerned.

A) *Document/Literature Review* – (*secondary data sources*). The consultant reviewed documents on the TB programme.

B) *Field data collection*[3] – from primary data sources. The consultant collected data from the following respondents:

a. *TB patients, health workers, and community volunteers*: Questionnaires were administered to all three target groups.

b. *Key informant interviews* - Information was also collected from key informants made of the DDHS, CHWs, Health staff at health facilities, volunteers to patients and community leaders.

c. *Focus Group Discussions* - Group discussions were used to generate information on the needs/gaps at community levels on the implementation of the TB programme.

d. *Observation* - information obtained by observation reinforced the collected data.

2.2.2 Data collection Instruments

Two main instruments were used in the data collection exercise namely;

(A) Questionnaire: *three questionnaires were used. These were:*

- *Exit questionnaire for the TB patients*
- *Questionnaire for the health workers*
- *Questionnaire for the volunteers***.**

(B) Interview Guide: *for the key informants and the FGDs***.**

(Copies of the survey tools and instruments are in Appendix 2)

Observation

Supplementary information from records at the district and health facilities reinforced the collected data.

2.3 DATA PROCESSING AND ANALYSIS

Collected data was analysed thematically using transcription of verbatim responses to reinforce the quantitative findings.

[3] During the data collection, the initial stage was to list all TB patient within each of the selected areas at health centers and a sample of patients selected from each of them.

2.3.1 Quality Control

Assurance of data quality is one of the most significant and essential issues emphasised by IMPACT during the implementation of any assignment. We instituted control at all stages of the assignment: from the design phase, field data collection and data analysis. Some of the important measures undertaken included:

- ***Training of Field Team:*** Research assistants/Enumerators were trained so as to:
  - Enlighten them about the study objectives.
  - Give the field assistants a good understanding of data collection tools and equip them with skills and techniques to be utilized in data collection.
  - Ensure completeness and accuracy of data collected.

- ***Pre-test of Data Collection Tools:***

  Following the training of RAs, the Consultant pre-tested the survey instruments/tools in a real field environment. Based on the experiences of the pre-test, the Consultant believes that the following were achieved:
  - ✓ better understanding of the possible field challenges by the team,
  - ✓ helped improve field planning and organisation of logistics during the actual field work,
  - ✓ revised survey instruments to ensure accuracy and reliability of data.

- ***Field Supervision and Controls:***

  The Consultant deployed a supervisor in each of the selected areas/districts drawn from the core experts. These were responsible for conducting spot checks in the field in addition to coordination of all the meetings.
  - *2 Research Assistants were assigned to each district area.*
  - *The research assistants in liaison with the supervisor were responsible for field editing of questionnaires before submission to the data analyst.*

☞ ***Manual Editing and Data Entry checks:***

All completed field instruments were checked for completeness, consistency and accuracy before data entry. In addition, there were in-built controls in the data entry programmes especially on entry to avoid out layers in the data entered.

2.4 PROBLEMS AND LIMITATIONS

The survey though successful encountered some problems. The problems include the following:

- **Limited time:** the consultant had to work within the limited time yet an exercise of this magnitude required more time for proper planning and effective execution. For example it was next to impossible to plan and execute the field work in just 2 weeks.

- **Limited Resources:** the exercise was clearly faced with the problem of limited resources as the consultant had to manage a multiple of crises because of insufficient funds. An example was a sudden change in weather that brought rain yet the main mode of transport used during the research was motorbikes "boda bodas".

- **Long distances:** the TB patients to be interviewed were in the villages/communities and not met at the health centers as anticipated. The patients were scattered over a large area that locating them was very problematic. This required the researchers to move long distances. This affected the exercise in three ways:
  - i) It took longer to reach the TB patients' homes.
  - ii) By implication, it meant that not all the targeted respondents could be reached hence there was a shortfall in the anticipated returns. *(see table 4 showing the returns per district)*
  - iii) It made the exercise costly as the budgeted for money for local facilitation was insufficient. Costs for transport doubled for all the districts (save for Soroti and Kampala) and hence had some monetary implications.

This was the especially in the districts of Arua, Apac, Kyenjojo, Mbale and Hoima.

- **Poor village road networks:** the village road networks were another source of frustration to the researchers. In addition to the aggravation to the researchers, their bad state (more often cattle trails) was used as an excuse to increase the fares/transport charges. This also delayed the completion of exercise.

- **Suspicion and hostility from respondents:**
  - *Patients*: ~~s~~Some patients were very suspicious of the researchers as to the motives of the researchers' visits. Though this could be attributed to the stigma faced by these people in their communities, it very much frustrated the researchers' efforts of attaining targets.

  - *Non cooperation from other key informants and staff*: There were incidences where the researchers were not given the necessary cooperation by the relevant authorities. In other instances the relevant authorities delayed the research team to start conducting the exercise due to bureaucracy.

- **Technical and design Limitations:**
  - *Non DOTS facilities not surveyed*: it was not possible to trace the non-DOTS health units. As a result no comparison was done between the DOTS and non-DOTS facilities.
  - *Bureaucratic delays*: Especially in Kampala where the process was delayed leading to low returns in respondents.
  - *Disproportionate representation in the returns:* while the sampling procedure of patients was based on a systematic proportionate sampling procedure, the returns in some districts were low and the targeted number of patients was not attained while in some districts like Arua, higher numbers were realised. Depending on the available logistics, level of

support from the districts and weather conditions, the number of respondents attained varied greatly.

3.0 STUDY FINDINGS

3.1 Summary Characteristics of Surveyed population

The study targeted 732 TB patients, 240 FGD respondents, 100 volunteers and 100 health workers from the 10 districts targeted by the study. Of these, the study got 45.2% TB patients/ respondents[4], 92% volunteers and 97% health workers. Table 4 below shows the number of respondents per category per district:

Table 4 Showing Number of Respondents by District Surveyed

District	Patients	Volunteers	Health Workers
Apac	**20**	**10**	10
Arua	**90**	**9**	10
Hoima	**32**	**10**	10
Kampala	**40**	**11**	9
Kiboga	**22**	**10**	10
Kyenjojo	**26**	**10**	10
Mbale	**12**	**8**	7
Mukono	**24**	**8**	13
Rakai	**43**	**10**	8
Soroti	**22**	**6**	10
Total	**331**	**92**	**97**

Find below in Figure *2* a graphic presentation of the TB patients respondents surveyed by district[5]:

Figure 2:

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The study had targeted 100 health workers in the 10 districts. Chart 1 below shows the graphic distribution of health workers respondents by district.

[4] Low returns for most districts were attributed to inadequate transport facilitation for the research assistants. The Consultant had envisaged that TB patients would be got at health units but the reality was that it was necessary to trace them in their villages. In addition Kampala's returns are low mainly due to two main reasons: (i) most TB patients from Kampala are on a self-administered treatment thus difficult to trace and (ii) it was not possible to visit Mulago Hospital on a TB clinic day when it would have been possible to get more TB patients.

5 Some TB patients especially from Arua district reported to be from districts that were not covered under this survey hence appearance of Yumbe, Nebbi and Moyo districts in the coverage

Chart 1:

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3.1.1 Characteristics of Respondents

The study examined the gender categories of the respondents in the surveyed area and findings indicate that about 56% of TB patients were males compared to 43.7% females. In addition, findings indicated that 41 volunteers were males compared to 47 females. Table 5 below shows client and volunteer respondents' distribution by gender.

Table 5 showing Distribution by Gender

Gender/Category Respondent	Patients	Volunteers
Male	179 (56.3%)	41 (46.6%)
Female	139 (43.7%)	47 (51.1%)
Total:	**N=331**	**N=92**

Findings indicated that the average age for the TB patients was 34 years while that one for the volunteers was 37 years.

Table 6 showing Average age Client and Volunteers respondents

	Patients	Volunteers
Average age (years)	34.00	36.86

Findings also show that the majority of the TB patients (48.7%) were married, while 24.2% were single, 15.6% widowed and 11.5% separated as shown in *Chart 2* below:

Chart 2:

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Findings further showed that the household of TB patient respondents had on average three males and four females per household. On the other hand, each household had an average of 4 children compared to 3 adults per household as shown in the table below:

Table 7: Showing the Average Household Size of Patients by Family Member Category

Category of Household Member	Average size
Average Males	3
Average Females	4
Average Adults	3
Average Number of Children	4

3.1.2 Education Levels of Household Heads

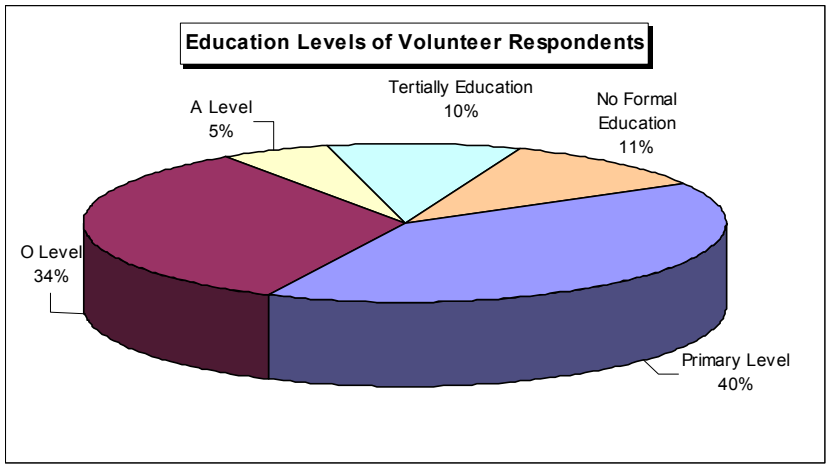
Generally, most TB patient households were literate with about 56% reported to have completed primary education (Primary 7), about 18% had attained O' level while 16.1% had no formal education and 4.8% had attained tertiary education. Table 8 below summarises the patients' levels of education.

Table 8 showing the Education Level of HH of TB patients

Education Level	Patients - Freq.	%age
Primary Level	186	56.4%
O Level	59	17.9%
No Formal Education	53	16.1%
Tertiary Education	16	4.8%
A Level	13	3.9%
Don't Know	3	.9%
Total	330	100%

In comparison, there were significant variations in the education levels of the volunteers compared to the client respondents. As summarized in Chart 3 below, though the majority (40%) had completed primary education, there was a significant increase of volunteers with "O" level, "A" level and tertiary qualifications at 34%, 5% and 10% respectively.

Chart 3:



Further analysis indicated that the largest proportion of the health workers (40%) had a qualification of Nursing Assistants, followed by 25% for Nurse (registered/enrolled) and 22% as Clinical officers (with a Diploma qualification). As summarised in Table 9 below, about 9% of the health workers had a Midwife qualification and 4% were qualified Medical doctors.

Table 9:

Qualifications	Freq	%
Nursing Assistant	38	39.6%
Nurse	24	25.0%
Clinical Officer / Diploma	21	21.9%
Midwife	9	9.4%
MBCHB	4	4.2%
Total	96	100.0%

The above findings could have implications on the planned IEC activities targeting patients utilising health workers as a channel in terms of the possible communication and education channels that can be employed. In addition, the fact that a significant proportion of the household heads and volunteers had no formal education calls for flexibility in the IEC approach to be designed.

3.1.3 Source of Household Income

Largely, the majority of the TB patients (35%) were peasants while 27% had their source of income from self-employment, 16.3% depended on others mainly relatives for survival while about 14% were casual labourers. Figure 3 below shows the different sources of income for the TB patients:

Figure 3:

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Whereas TB services and drugs are provided free of charge at most health units/facilities, this lack of steady income by most patients could have some implications on the utilisation and accessibility of the service especially in terms of transport costs.

3.2 Knowledge about Tuberculosis (TB)

TB management covers a range of components that include the following:

- ✓ *Diagnosis of TB*: TB diagnosis is done in three major ways namely:
  - ☞ Clinical diagnosis.
  - ☞ Sputum testing.
  - ☞ X-ray tests.
- ✓ *In-patient treatment*: Patients are admitted during the course of treatment.
- ✓ *Directly Observed Treatment with Short course (DOTS)*: under the DOTS strategy, the patient is assured of a consistent drug supply at home for a period of 6-8 months. Volunteers are selected to monitor and report on the patients' compliance with treatment regulations. These volunteers are normally selected from communities or/ and the patient's family members.
- ✓ *Outreach service*: this refers to the periodic provision of some degree of TB management at health units that ordinarily do not offer TB services.

3.2.1 Knowledge of TB Case Finding and Detection

These are processes employed in detecting TB infected persons, confirming the diagnosis and eventual treatment. TB cases are usually classified as TB suspect, TB case or a definite TB case.

There are limitations in the case definitions because in some cases TB is extra pulmonary and diagnosis is based on culture-positive specimen and

histological tests or strong clinical suspicion consistent with active TB followed by a full course of chemotherapy.

To determine respondents' knowledge about TB case detection, the study assessed participants' knowledge on TB spread, signs and symptoms and diagnostic capacity like laboratory including microscopy and X-ray.

3.2.1.1 Knowledge of Spread

Findings indicate that a large proportion of patients (61%) were aware of the major cause of TB spread being airborne. It was also reported that the patients were aware of other possible causes of TB spread with about 62% respondents who mentions sharing utensils, 27% reported that TB spreads by contact with a patient, 5% of the respondents know smoking spreads TB as summarized in Figure 4 below:

Figure 4:

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It was noted from the above findings, that on average there was moderately good knowledge about the principle mode of TB spread among the TB patients (i.e. airborne). However, there was a significant number of patients who were not knowledgeable about the major causes while others had erroneous or mythical perceptions about the major mode of TB spread; like witchcraft, smoking, sexual intercourse, physical contact, inheritance and alcohol. Such misconceptions call for increased awareness and education efforts targeting TB patients.

From the perspective of volunteers, a number of issues were identified as the most common myths and misconceptions about TB spread. As summarised in Figure 5 below about 41% of the respondents mentioned witchcraft as the most common cause of TB spread, followed by 37% for HIV/AIDS, 13% for smoking and 9% for sharing of utensils.

Figure 5:

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The about misconceptions were affirmed and collaborated with findings from the health workers who reported a number of major myths among the

communities regarding the modes of spread. About 55% of the health worker respondents reported sharing of equipment, 13% for hereditary, 11% for witchcraft and another 11% for sexual transmission, 5% for un boiled food/drinks, and 4% for alcohol.

The above findings indicated that while there was moderately good knowledge about the mode(s) of TB spread among the patients, there was still need to intensify education of patients to minimize risks e.g. delay in seeking proper health care associated with misconceptions and myths.

a) Community Knowledge of TB Spread

During FGDs, it was determined that generally, participants depicted a fair knowledge and understanding of the causes of TB spread with most mentioning airborne transmission. The other most mentioned causes for TB spread included sharing utensils with the patient, kissing, sleeping with patients, alcohol consumption and smoking.

However, participants in Kasawo Sub-county, Mukono conceded that generally they had little knowledge about TB spread mentioning that for them, they understood that *" TB is caused by HIV/AIDS".* In Busisi sub-county Hoima, participants thought "*…most patients of TB in this area simply inherited it from their parents … it runs in the blood lineage".*

The above findings implied that community awareness, mobilization and sensitization campaigns should be reinforced especially in the rural communities to minimise/ eradicate TB spread.

3.2.1.2 TB Detection - Signs & Symptoms

The survey attempted to establish the respondent's knowledge about signs and symptoms of TB to evaluate detection capability. The most commonly mentioned signs and symptoms by the client respondents were, in order of importance: cough (84%), loss of weight (36.3%), chest pain (31.4%), night sweating, fever (22.4%), general body weakness (16.9%) while loss of

appetite attributed for 14.5% and vomiting 9.1%. Some patients mentioned other symptoms they considered to be for TB that included: swelling of the body, paralysis, whitening of the eyes and sores in the mouth.

Figure 6:

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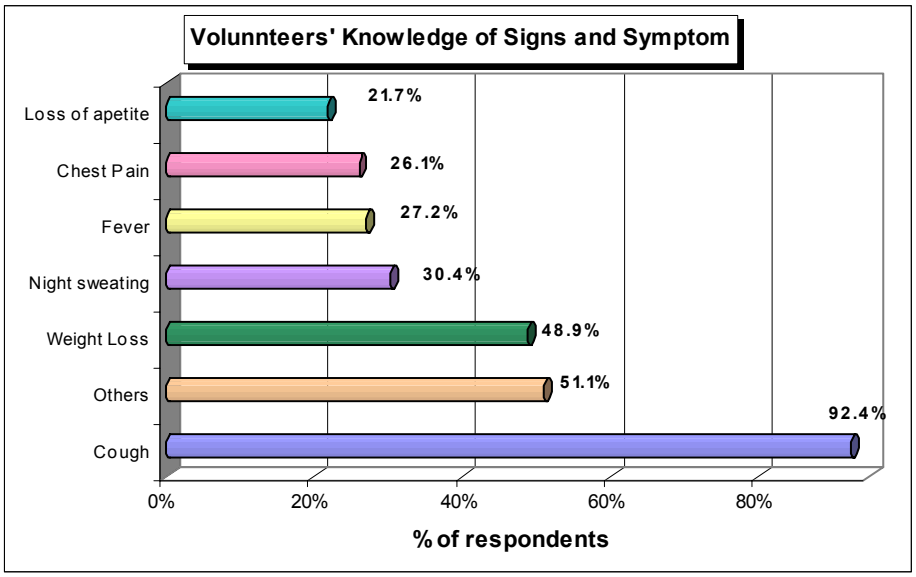
Generally, most volunteers knew about signs and symptoms of TB. The most commonly mentioned symptom of TB was cough (92.4 %), loss of weight (49%), chest pain (26.1%), night sweating (30.3%), fever (27.2%), loss of appetite (21.7%). The results leave a lot to be desired. Figure 7 below shows the frequency volunteers' knowledge about TB symptoms and signs.

Figure 7:



a) Health workers knowledge on Signs & Symptoms of TB

Generally, all the health workers interviewed are conversant with the signs and symptoms of TB. However the findings leave a lot to be desired in relation to problems met in case diagnosis and treatment.

Health workers mentioned there were many problems hindering case detection at both health centre and community level while they offered some suggestions that would help improve DOTS strategy in these areas. As summarised in Figure 8 below, 53.4% mentioned lack of equipment as a main problem hindering case detection at the health facility, 42.5% mentioned lack of trained personnel, 31.5% mentioned lack of information,

13.7% mentioned poor facilitation while 2.7% each mentioned poor coordination and distance from the health centre.

Figure 8:

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It is interesting how the health worker attitudes and skills are often ignored by them. Even with all the above they mentioned in place, without a change of attitude towards TB control, it is difficult to achieve much. With a few committed health workers a lot can be achieved – "Less is More".

Further analysis of findings from the Health workers also identified a number of factors which were considered to hinder case detection at community level. Findings showed that about 50% of the health workers mentioned lack of awareness, 34% for stigmatization, 23.3% for lack of transport and about 11% for traditional beliefs as indicated in Figure 9 below. Also about 7% mentioned lack of trained personnel while 4.7% mentioned lack of appropriate equipment at health centre as the problem.

Figure 9:

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From the FGDs the following constraints were mentioned to affect the TB detection in the study areas:

- Few health workers – *FGDs & Key informants in Kyenjojo, it was mentioned that there were few lab assistants who are overworked.*
- Limited health centres – *there are incidences where very few health centres cover a wide area e.g. FGDs & Key informants in Kyenjojo*
- Limited facilities – *FGDs & Key informants in Kyenjojo and Apac, this was the constraint most mentioned*

- Poorly distributed infrastructure facilities - *FGDs & Key informants in Kyenjojo*
- *Insecurity in Apac hampers the work of volunteers*

3.2.1.3 Improving Diagnostic capacity

The survey examined the general diagnostic capacity for TB in the surveyed districts and the general impression was that it was poor or inappropriate especially in terms of the quality of services offered.

Based on the responses from the health workers, the general impression was that the key approaches considered effective in TB case detection focused on education and sensitization rather than investment in health infrastructure. Suggestions mentioned by health workers to improve case detection are sensitization 75% *(including success stories from recovered patients and assurance of free TB drugs)*. This was followed by improvement in access to health facilities, 15% for training of health personnel and 10% for follow-ups. As summarised in Figure: 10 below, about 10% suggested provision of transport facilitation and 3.4% mentioned provision of counselling services. **Figure 10:**

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3.3 Knowledge of Treatment

The aims of treatment of TB are:

- To cure the patient of TB
- To prevent death from active TB or its late effects
- To prevent relapse of TB
- To prevent transmission of TB to others and
- To prevent development of acquired drug resistance.

It is universally recommended that achieving effective treatment of TB should be simple possible through; avoiding multiple alternatives, facilitating training in TB management, providing drug procurement and supply, and drug administration avoiding errors in prescription. DOTS strategy is employed to achieve the fore mentioned aims.

With self-administered treatment, where drugs are supplied fortnightly or monthly, there is no assurance that the patient is taking all the drugs. In some instances, treatment interruption was attributed to volunteers not checking on the patients. The advantage is that mobile populations and patients with very limited access to health services are able to access treatment. Thus, DOTS remains the ideal strategy for achieving the aims of treatment of TB.

For purposes of this survey, assessment of the level of knowledge of treatment of TB examined the following:

- TB patients knowledge,
- Volunteers,
- Health workers knowledge.

3.3.1 TB Patients Knowledge on Treatment

The survey attempted to examine what the patients' knowledge about treatment of TB[6]. The findings indicate that the TB patients were rather knowledgeable on TB treatment as shown in the table below:

Table 10 showing Patients Knowledge of TB Treatment

Kind of TB Treatment	Freq.	% of Respondents
Drugs	302	**86.3%**
Periodical lab testing	32	**9.1%**
Resting/Instructions	6	**1.7%**
Others	10	**2.9%**
Total	**N=331**	**100.0%**

3.3.2 Volunteers Knowledge on TB Treatment

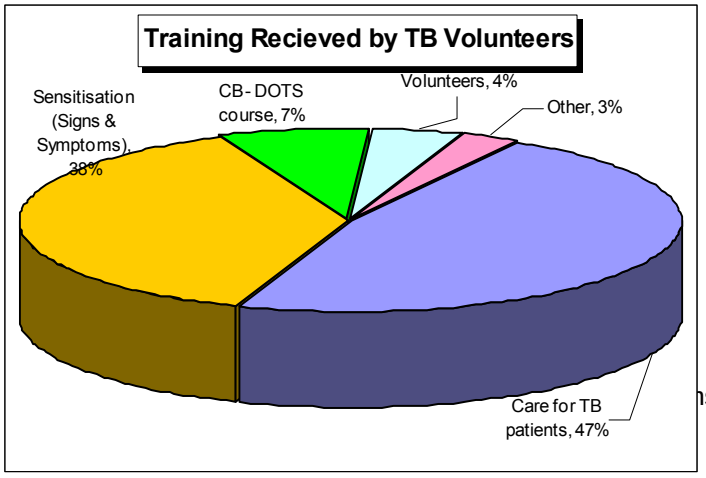

Chart 4:

On the other hand, a fairly good number of volunteers had received some training as shown in Chart 4.

[6] ...s c) treatment

As Chart 4 indicates, 47% had received training in caring for TB patients, 38.2% in TB signs & symptoms while 7.4% had undertaken a course in CB DOTS.

Findings further indicated that 70% of the volunteers knew that drugs are taken every day, 13% know about the need for regular laboratory tests and 10% knew of CB DOTS.

Chart 5:

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3.3.3 Health Workers' Knowledge on treatment

The survey examined the knowledge of health workers and their relevant training levels that could influence their knowledge.

Study findings showed that the majority of the health worker respondents (56%) had received a refresher course in TB, while 43.8% had never received any.

Table 11 Proportion of health workers that received TB related training

Received Training	Freq.	% respondents
Yes	54	56.3%
No	42	43.8%
Total	96	100.0%

DOTS related training by NTLP includes: DOTS strategy, TB and Leprosy control, TB management, TB logistics, TB in children, management of TB and CB-DOTS. Training in TB related topics include: TB orientation, treatment of TB and leprosy, TB/HIV AIDS course, sensitization course and general laboratory training. Microscopy, laboratory assurance and other health TB related training was attended by a few health workers.

For those who had the training, 84.8% rated the training to have been very relevant to help them improve. 21.2% rated the training to have been relevant to their needs as health worker but the quality of training did not meet their expectation while one (3%) respondent felt the training was irrelevant to his needs as a health worker. Majority of those who had

received the training 59.6% had received it in the year 2004, 34.6% had it in 2005, 25.0% in 2003, 11.5% in 2002, 7.7% in 2000 and 1998 each, 5.8% in 1999, 3.8% in 1997 and 1996 while 1.9% received their training in 2001. The period at which the training was received may have had the influence on the poor out come of the DOTS strategy in the recent past. It is critical to mention that these health workers also need training in interpersonal communication skills and counselling.

a) DOTS and its Application

In terms of knowledge of the application of DOTS, the survey examined the knowledge of the Health workers (HW) on the components of DOTS drug combination. Also the study determined HW's level of understanding of the following terms in DOTS: *"direct, adherence monitoring, course and duration of therapy".*

Findings further indicate that about 95% of the health workers interviewed knew that ideally, swallowing of drugs should be observed daily. About 38% knew that for purposes of monitoring and having good adherence a patient should be observed swallowing the medicine at least three times a week. Only about 56% knew the duration and the combination of drugs used in the intensive course, while 11% knew that the duration of the continuation phase may be 4 or 6 months. As shown in Table 12 below, about 55% knew that duration of treatment was 6 to 8 months depending on the drug combination.

Table 12:

Known of Drug Courses Used in DOTS	**Freq.**	**% of Responses**
Direct observation: observed daily swallowing.	88	**94.6%**
Adherence: observe at least 3 X per week	35	**37.6%**
Course Initial Phase:- start 4 drug Comb. daily X first 2 months	52	**55.9%**
Continuation: next 4-6 months on the 2 drug comb.	10	**10.8%**
Duration: at least 6-8 months	51	**54.8%**
Lab monitoring:- 3 sputum tests during course	41	**44.1%**
	N= 92	

Findings also indicated that only 44.1% of the health workers interviewed knew that laboratory monitoring should be done at the start of therapy, at the end of the intensive phase and lastly at the end of treatment.

Comments:

- The above findings indicated that indeed the knowledge on DOTS was quite poor and given that about 56% of the health workers had received refresher course this was rather sad. There may be need for compulsory refresher courses for the workers who attend to TB patients.

- Variations in the level of knowledge on key components DOTS ranging from as low 38% on some areas and 95% on others could be misleading yet this category of staff are expected to be well knowledgeable about basics of DOTS; if not addressed, coupled with a proportion of HWs that had not received training, this would affect the effectiveness of DOTS.

b) Improving Case Treatment:

Suggestions mentioned to improve case treatment were sensitization for about 33% of the respondents, followed by increasing availability of drugs (31%), about 20% for each; mentioned intensification of follow-ups and transport facilitation to Health workers, counselling services by 18% and provision of food by 16%. Also about 4% of the respondents proposed reduction of tablet size and 2% mentioned encouraging DOTS generally.

3.3.3.1 Effectiveness of Health Workers, Volunteers and family members in DOTS delivery

The study attempted to assess the effectiveness of health workers, volunteers, TB patients & family members in DOTS delivery. Findings indicated that about 66.8% of the respondents were of the view that health workers were most useful and effective in drug administration while 37.2 % thought that they (health workers) were effective in advising on how to take drugs. Other respondents 18%, 13%, 11.8%, 9.1%, 2.7% and 2.1% mentioned that health workers were effective and useful in counselling and encouraging patients, doing laboratory tests for TB, health

education/sensitization, monitoring patients, admitting patients into health centres and diagnosis of TB respectively.

Table 13: showing the effectiveness & usefulness of Health workers

Activity of Use	Freq.	% of Respondents (N)
Administer drugs	221	**66.77%**
Advice on how to take care	123	**37.16%**
Counselling and encouraging patients	60	**18.13%**
Do lab tests for TB	43	**12.99%**
Health Education/Sensitization	39	**11.78%**
Monitor Patients	30	**9.06%**
Admit Patients into HCs	9	**2.72%**
Diagnosis of TB	7	**2.11%**
N =	**331**	**100.00%**

Patients identified and mentioned a number of areas where they felt the volunteers were effective and useful in helping patients. About 42% mentioned effectiveness of volunteers in "compliance to take drugs", followed by 34.% for monitoring patients, 26% for collecting drugs for the patients, another 26%for linking patients and health workers 9%, while 1.5% and 1.2% of the respondents thought reported effectiveness in distribution of supplies like soap and food, and in tracing TB cases in the communities respectively.

Table 14 showing Effectiveness and usefulness of Volunteers

Activity of Use	Freq.	% of Respondents (N)
Help Patients to take drugs	141	**42.60%**
Monitor TB patients	113	**34.1%**
Collect drugs for Patients	87	**26.3%**
Linking Patients and health workers	28	**8.5%**
Distribution of supplies - soap, food	5	**1.5%**
Tracing TB cases in communities	4	**1.2%**
N	**331**	

Findings show that 81.9%, 25.7%, 9.1%, 4.5% and 3.3% of the respondents think, respectively, that family members are effective and useful in helping patients' domestic chores like cooking and washing, counselling\encouraging patient, monitoring patients, provision of transport and collecting drugs from the health units respectively.

Table 15 showing Effectiveness of Family Members

Activity of Use	Freq.	% of Respondents (N)
Help in domestic chores - cooking, washing	271	81.87%
Counseling/Encouragement	85	25.68%
Monitor patients	30	9.06%

Provisionof transport	15	4.53%
Collect drugs from health units	11	3.32%
N: =	**331**	**100.00%**

3.3.2 DOTS Coverage and Effectiveness

Findings indicated that in all the 10 districts surveyed, DOTS services were generally offered[7]. The District TB & Leprosy coordinator deputized by assistants coordinates the TB activities in a given district. Findings indicate that DOTS coverage in Mukono District was about 92%.

3.3.2 TB Patient Compliance to Treatment

The survey findings indicated that generally the majority of the TB patients interviewed (84%) had never stopped TB treatment while 16% had ever stopped/interrupted treatment.

Chart 6:

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Various reasons for stopping the medication were mentioned. About 23% stopped because they had improved and were ignorant about the course of treatment. About 18% mentioned they had stopped because they were isolated and had no volunteers to support them, 16% had stopped because of the side effects and 11% stopped because of migration. Also about 9%, 9%, 7%, 5% and 2% mentioned to have opted to use local herbs, long distance to health centre, drug stock out, hunger and food shortages, and having tested positive for HIV respectively as reason for stopping treatment.

Figure 11:

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The survey also attempted to establish reasons which could lead other patients to stop TB medication. As summarised in figure 15 below, findings indicated that 27.8% of the respondents attributed stoppage of treatment to side effects, followed by 25% who mentioned ignorance, 22.2% for gaining weight and starting to drink alcohol. A few others (13.9%) mentioned weakening of the patient, long distance to the health centre (5.6%), poverty (2.8%) and no time for taking drugs as the possible reasons for patients stopping taking the drugs.

[7] Note that non-DOTS TB patients were not covered as explained in the methodology

Figure 12:

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The opinion of the volunteers on reasons that were causing TB patients to stop taking drugs were: 32.6% mentioned ignorance, 16.3% laziness, 7.6% side effects and 1.1% poverty.

Figure 13:

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On the other hand, health workers mentioned compliance being affected by: duration of therapy which was mentioned by 36.1%, transport mentioned by 29%, lack of knowledge by 26%, side effects by 24%, poverty by13.9%, migration by 10%, stigmatization by 8.3% while facilitation was mentioned by 6%.

Figure 14:

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3.3.2.1 Improving Compliance to TB Treatment

The following were the opinions of TB patients on how to enhance compliance to TB treatment: 40.2% recommended community sensitization, 16% availability of good diet and family support, 8.2% were for increased direct observation therapy by volunteers, monitoring by LC1s, ensuring adequate supply of drug, testimonies by recovered patients, family member involvement and reduction on the duration of treatment. Table 16 below summarises TB patients' opinions on ways to enhance compliance during treatment.

Table 16:

Proposed actions	Freq	% of respondents
Community Sensitization	133	40.2%
Socio-support (good diet, family support)	53	16%
Increased Direct Observed Therapy	27	8.2%
Monitoring by LC1s	23	6.9%
Adequate supply of drugs	17	5.1%
Peer Education (Testimonies)	16	4.8%
Reducing on the duration of treatment	2	0.6%

Total:	**96**	**100.0%**

The proposed measures to be taken in order to improve compliance by volunteers and health workers were very much similar to those proposed by the patients. As can be noted from figure 15 below, 40.2% volunteers were opting for more sensitization through awareness creation, 18.5% advocated for more follow-ups, 17.4% favoured IGAs as a way of alleviating the biting poverty of most TB patients while about 9% called for improved access to health facilities.

Figure 15:

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Similarly, 37.8% of health workers thought that increased sensitization would improve compliance to TB treatment, while 30.5% favoured steady drug supply, 19.5% routed for follow-ups and facilitation. Figure 16 below further shows that 18.5% of health workers favoured counselling as a way to improve treatment, 16% 3.7% reduced tablet size and 2.4% through increased efforts that encourage DOTS services.

Figure 16:

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At the community level, the public was generally more supportive of the health programmes which educate and motivate them to complete the treatment. As expressed by the FGD at Aber in Apac District "… *they encourage openness so that people can be easily persuaded to go for testing and treatment" (FGD in Aber-Apac)* – *this seems irrelevant here).*

Challenges & Constraints to effective TB Management:

Based on the discussions with key informants and FGDs, the following key challenges that constrain effective TB management were identified:

- Food for the patients – it is important for patients on medication to feed well. Yet, some of them may not have the food.
- High rate of turn-over of health workers in health units – *this was mainly attributed to poor facilitation thus abandoning station for other lucrative offers.*

- ☞ Unethical conducts of some health practitioners – some private practitioners were money minded who have "thrown all professional ethics out of the window". There is too much commercialization and some do not want to lose their patients.
- ☞ Dynamics of modern urban centres – key informants in Kampala and Soroti noted *"……most patients stay in 'muzigo' and sometimes alone with no one to ensure that they have taken the medicine and that they also eat well"*. The Kampala TB and Leprosy Supervisor observed that "*…the district has not been brought on board as far as DOTS is concerned"*.
- ☞ Facilitation for volunteers – there was a pronounced lack of patients' follow-ups by volunteers and health workers. This was attributed to poor or no facilitation "*….a setback as they have responsibilities which they can't fulfil". (Rakai)*
- ☞ More training for volunteers and health workers on how to handle patients in a technical situation. *Though they were trained on how to handle DOTS, they need some refresher courses*

3.3.2.3 Integration of other health related services/issues

The survey attempted to establish from patients to what extent other health services were integrating other services into TB management. 86% respondents mentioned that nutrition/food support was offered in addition to TB treatment. 5% mentioned financial support, 4% material support such as blankets, 2% mentioned transport while 3% mentioned other support.

Figure 17:

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On the other hand, as summarised in figure 18 below, about 91% of the health worker respondents mentioned that health education was offered in addition to TB treatment. 88% mentioned hygiene education, 83% mentioned nutrition education, 80% mentioned HIV counselling services, 72% mentioned

laboratory services, 49% mentioned HIV testing while 34% mentioned HIV treatment.

Figure 18:

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A point to note here is that while patients think more of material things, the health workers mentioned health related issues.

3.4 INFORMATION, EDUCATION AND COMMUNICATION (IEC)

The study examined the status and role played by Information, Education and Communication (IEC) in the effort of controlling and treatment of TB. Based on the survey results, three main aspects were examined namely:

- ✓ Current Sources of Information
- ✓ Effectiveness of current sources
- ✓ Preferred sources/channels of Information

3.4.1 Current Sources of Information

The survey examined the various sources of information on (a) TB spread, (b) TB signs & symptoms and (c) TB treatment. Findings indicate that about 64% of the TB patients learnt about TB from health workers, 16.4% from Radio and about 12% from family members. As shown in figure 19 below, Printed materials accounted for less than 1% while 7% got their information from other sources such as schools, friends and neighbours. Very few print materials have been produced and disseminated. This could be part of the reason it is not mentioned as a major source.

Figure 19:

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On the other hand, most volunteers listed health workers as the main source of information (60.9%), family members and friends 18.5%, 13.0% from workshops and seminars as well as radios/TV and about 8.7% from the print media. Community meetings accounted for 6.0% while printed materials such as medical encyclopaedia were 2.2%. Stakeholder findings also indicate that radios stations play a crucial role in community mobilization.

Table 17 : Current Sources of Information about TB for Volunteers

Information Sources	Freq.	%
Health worker	56	60.9%
Family Members, Friends	17	18.5%
Workshops/Seminars/Training	12	13.0%
Radio/TV	12	13.0%
Print Media	8	8.7%
Community Meetings	7	7.6%
Others	3	3.3%
Books (Medical Encyclopaedia)	2	2.2%
Total	**92**	100.0%

Generally, most community members mentioned health workers as their source of information on TB. Other listed sources include printed materials, radio, meetings, etc. Findings further indicated that at the community levels, innovative communication channels have evolved that included the following:

- "Church leaders since they are looked up to" (*FGD Kitoba Sub-county –Hoima; Kyenjojo).*
- "Sensitization through Music and Drama" (*Apac CBOs; Kyenjojo).*
- Local leadership as*"…they are a vehicle of information because they act like a bridge between health workers and the local people*" (*District TB & Leprosy Coordinator –Soroti*).
- Village health teams – *"comprising of 2 women ad 2 men per village who have been trained to give health advice on TB" (LC V Secretary for Health Apac).*
- TB drug distributor – "*… who are normally assigned sub-counties*" *(LC V Secretary for Health – Soroti)*

Further analysis reveals that most patients interviewed were generally equipped with knowledge and information on TB spread, signs and symptoms of TB as well as TB treatment. Findings also indicate that other than treatment, 23.2% of the patients are educated about health related issues such as nutrition, 17.6% hygiene, 15.1% HIV/AIDS testing, 13% HIV/AIDS counselling, 12% TB prevention, 11% health education and 6.0% in drug administration.

Figure 20:

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The survey also attempted to establish what other information about TB respondents would like to receive. About 23% would like more information on spread of TB, 18.8% on management of TB, 17.4% on TB treatment and about 16% on the causes of TB. 14% wanted to know the latest information about TB, 9.3% wanted more information on TB signs and symptoms, 1.1% on chest related illnesses and about 1% asked for more information on treatment centres.

Figure 21:

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On the other hand, study findings showed that 67% of health workers would like to know more about the state of TB, 24% wanted to know about new drugs while 10% the relationship between HIV/AIDS and TB. Findings further indicate that 5% wanted to know the fate of resistant patients, 5.1% were keen to more about the side effects of drugs and 3.8% wanted to get more information on the modes of *transmission*.

Figure: 22

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3.4.2 Effectiveness of current sources

Findings indicate that most respondents were now aware of how TB is spread. Most respondents understand TB to be an airborne disease (38%), and another 38% attributed the prevalence of the disease to sharing of utensils and other equipment.

Table 18 showing how Patients Came to Suspect TB before test

Suspicion Sources	Freq.	%tage
Referred by h/workers	123	38.0%
Knowledge about signs & symptoms	101	31.2%
HIV/AIDS Counselling and testing	51	15.7%
Other	20	6.2%
Family member	19	5.9%
Health Education	10	3.1%
Total	**N=331**	**100.0%**

Health worker referral was the main reason most patients they came to suspect they have TB. Furthermore, most patients (31.2%) came to suspect that they had TB from knowledge internalized about TB signs and symptoms. Health education (3.1%) was the least common source of information accessed by patients while about 6% alluded to family members as their source of information.

At the community and institutional level, the current sources are given credit for promoting a good strategy for health information dissemination in regard to changing people's beliefs. As the LC V Secretary for Health - Soroti observed, most people still think there is "*a relationship between TB and AIDS*" –).

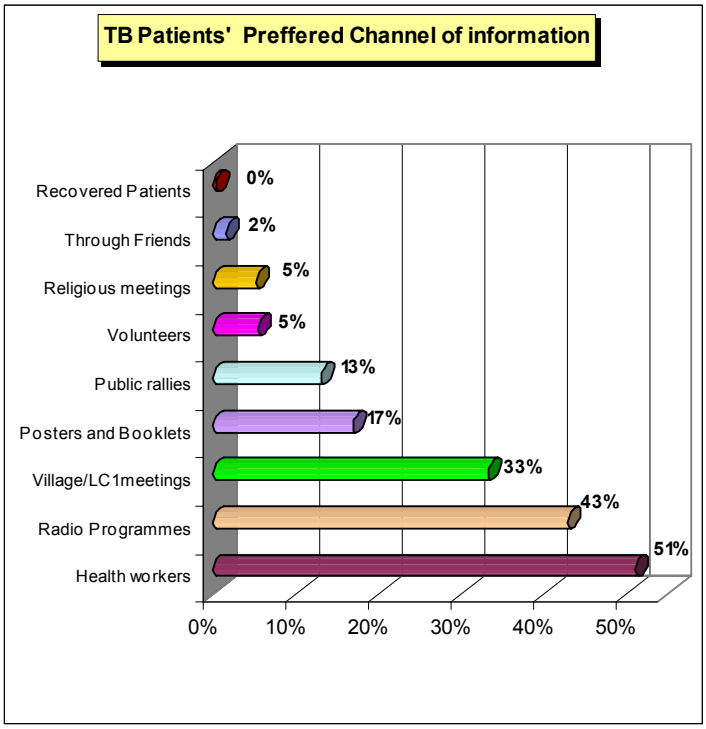
3.4.2.1 Myths and misconceptions on TB

In contrast, about 30% of the volunteers cited myths surrounding TB in the communities revolve around beliefs in witchcraft, 28.1% to HIV/AIDS, 26.6% to smoking and 6.3% to sharing utensils. Findings further show that there are still misconceptions about TB spread with 37% thinking that TB can be spread by talking to TB patients and 18.5% attributing spread to other issues such as getting in contact with cow dung. Findings also highlight the myths and misconceptions about treatment of TB with about 29% believing in the healing effects of herbal medicines, 5.3% believing that "free drugs do not heal" and 38.2% believing in other measures such as the healing effect of cow-urine.

3.4.3 Preferred sources/channels of Information

Findings showed that generally, health workers (30.1%) were the most preferred medium for channelling information about TB by the Tb patients. Radio programmes (25.3%), village/community meetings (19.6%), posters/booklets (10%) followed in the order of preference. Approximately 1% preferred using friends and 3.2% favoured the services of volunteers.

Figure 23:



Most communities on the other hand indicated a preference for the print media especially newsletters and posters. Other preferred channels are radio talk shows, testimonies by recovered patients and increased health education. Some communities would have preferred village meetings but as the FGD held in Lwankoni in Rakai District put it "… *turn up for community meetings is poor yet it would be the right fora to discuss these issues*". As alternatives, the following are being encouraged and promoted:

- ☞ educational programmes (*Lwankoni in Rakai*
- ☞ drama groups (*Kawempe FGD;*
- ☞ printed materials especially posters

3.4.4 Proposed Approach to encourage Testing of TB

On getting people with TB infection to test for TB, findings indicated that about 63% prefer sensitization, while 19.3% preferred community meetings and sensitization. This underscores the role and importance of information exchange and communication can play in the communities.

3.4.5 Preferred Communication channels for Volunteers

In contrast to the exit questionnaires for patients, findings showed that volunteers preferred community meetings (43.5%) and radio talk shows (19.6%) followed by print media (10.1%), others (9.5%), video shows 7.1%, Workshops 6.0% and drama 4.2% in their order of preference.

Further analysis showed that most volunteers also suggested increased awareness if improvement was to be registered in case detection 52% followed ensuring treatment-seeking behaviour about, and 37.1% respectively.

3.4.6 Preferred channels for Health workers

According to the Health workers surveyed, the most preferred channel of educating about TB was by use of community gatherings and meetings (71%). This was followed by about 44% who preferred printed media, 43% for radio and 25% for films and 14% for use of Drama groups. Also as summarised in figure 24 below, 9% recommended outreach programmes, and 2% each mentioned seminars/workshops and training programs.

Figure 19:
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3.4.7 Other Recommended Information Channels

In addition to the above channels of information delivery, from the FGDs, participants mentioned the following as effective channels:

- ✓ **Places of Worship:** *the influence of religious leaders was mentioned to be important and therefore need to utilise places of worship as effective channels for information delivery.*
- ✓ **Health education:** *general intensification of the health education activities in the communities was considered effective.*
- ✓ **Drama groups:** *these were considered effective especially if flexible enough to use local languages in delivery of messages*

Other Issues of Concern:

- ✓ **Stigmatization –** Most communities mentioned stigmatisation of TB patients as a major factor affecting the effectiveness of DOTs. As emphasised by participants in the FGD in *Lwankoni – Rakai;* the public tends to **"***treat patients as if they were outcasts".*

Also in the FGD at Mbuya Reach Out in Kampala it was noted that *"…people need to come to terms that TB is curable and is not always*

synonymous with HIV/AIDS. Patients are still isolated and discriminated against due to general lack of awareness.".

3.4.8 Recommended Ways to improve TB control in Communities

The study further attempted to establish what other ways were recommended through which TB would be controlled.

- About 63% patients recommended sensitization, 19.3% community meetings and mobilization, while about 5% recommended for radio programs.

- On the other hand, findings from volunteers indicate that about 65% recommended training and sensitization as the best way to improve TB control in communities. 19.4% called for nearer health services and facilities while 3% recommended the media.

From the above, it is evident that the largest proportion recommends sensitization for communities and the volunteers.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Key Conclusions

A number of conclusions were derived from the above survey findings regarding knowledge about TB and key issues affecting the effectiveness of DOTS. These conclusions on key issues are summarized as follows:

- ***Knowledge on TB and TB management:*** The level of knowledge was quite low among the communities and patients. The little knowledge was distorted by misconceptions and myths on TB spread and treatment.

- **Low level of Training for Health Staff and Volunteers:** At the level of volunteers and Health workers, their knowledge and effectiveness was undermined by lack of appropriate education or refresher training.

- ***DOTS Effectiveness:*** lack of adequate and relevant information on TB management undermined the effectiveness of DOTS. Health workers were considered the most appropriate and effective source of information at health centers and community level.

- ***Sustainability of the programme efforts –***

For sustainability of existing efforts by government and development partners, the following were highlightedogligheted:

  - ***Political commitment –*** For the fight against TB and in particular the DOTS programme to be a success, there is a need for increased political will on the part of political leaders to prioritize the progamme efforts. Generally, there was unanimity from all FGDs and key informant findings that more effort is needed in the TB control programs through increased resource allocation.

- ***Recruit more staff –*** some health facilities were said to have the capacity to carry out DOTS services but were redundant due to lack of staff and facilitation.
- ***Training for health workers and volunteers*** *- especially on health education issues, counseling and interpersonal communication skills*
- ***Facilitation to motivate the volunteers –*** *recognition, transport, aprons, T-shirts, other promotional materials etc*
- ***Ethics*** – there is need for massive re-orientation of medical officers as the study findings indicate that some health personnel (doctors/health workers) do not follow national and WHO guidelines.
- ***Increased collaboration between government/districts and private health service providers –*** *there is need to involve as many key stakeholders as possible since TB is a "public emergency".*

✷ ***Quality of Facilities and Services at health units –*** there was a pronounced need for increased government investment in diagnostic initiatives especially laboratory testing facilities at the health centers. However other indicators point to need for organizational and management turn-around to tap effectively the available resources/ improve service quality, rather than investment in infrastructure. Investment in staff training and overall improvement in management of health facilities was critically needed.

4.2 Recommendations

Based on the study findings and conclusions, a number of key recommendations were made:

- ***Design an effective IEC strategy to guide the implementation of the DOTS programme.***
  - *The role of the health worker as a key source information should be emphasized and capacity built to enhance effectiveness.*
  - *Promote compliance to treatment through use of counseling and provision of correct information.*

- ***Increase community sensitization and awareness efforts about TB symptoms and cure***
  - *Select appropriate channels and languages to be used to reach the masses*

- ***Improve monitoring and supervision of the service delivery system through management reforms.***
  - *Provide support to health workers and address issues related to TB management through support supervision*

- ***Staffing and training of Heath facility staff in TB management not satisfactory:*** *Build capacity of all health workers at all levels. Train laboratory assistants..*

APPENDICES

Terms of Reference for A Qualitative Study On Tuberculosis In Uganda

The Communication for Development Foundation Uganda (CDFU) is a Ugandan-based non-governmental organisation that supports, promotes and manages behaviour change communication (BCC) that positively influences the social development of men, women and children living in the East African Region.

CDFU has been contracted by Management Sciences for Health's (MSH's) Management and Leadership Program to work with the Ministry of Health, Health Education & Promotion Unit and the National Tuberculosis and Leprosy Program (NTLP), as well as other stakeholders to develop and implement and IEC/BCC strategy for TB control in Uganda.

Background:
Uganda is one of the 22 high-burden countries for TB. The National Tuberculosis and Leprosy Program's (NTLP) tuberculosis objectives are to reach a 70% case detection rate and an 85% treatment success rate by 2005. In 1997, NTLP adopted the WHO Directly Observed Therapy Short-course (DOTS) strategy aimed at ensuring high cure rates of TB patients, rapidly decreasing spread of the disease and preventing emergence of multi-drug resistant tuberculosis. Although the NTLP has made great progress in the implementation of its community based DOTS program, the case detection rate (53%) and treatment success rate (65%) are below the target.

There is a great need for increased political sensitisation and social mobilization to successfully expand TB DOTS. Further more, TB/HIV collaborative activities hither to have not been streamlined in TB. However, it is now emphasized that with 50% of TB patients being HIV positive in Uganda, this association of TB and HIV needs to be tackled by both the TB control and the HIV control programmes.

In order to develop a communication strategy for TB prevention and control that is effective, it is vital to collect background information and research on the knowledge, attitudes and behaviours of the target audience(s). Furthermore, it is vital to establish factors influencing treatment seeking behaviours, myths and misconceptions surrounding TB.

Purpose
To conduct a detailed qualitative study on factors influencing treatment seeking behaviour, and household and community perceptions in relation to Tuberculosis in Uganda.

Terms of Reference:
The contracted research organization will work under supervision of CDFU to conduct the Research in districts selected by CDFU in liaison with NTLP. The firm will select and train research assistants, develop research questions, design instruments, pre-test, modify, conduct research among selected groups including health personnel, patients with TB, community workers and community members. The firm will analyze and make a report of the findings.

Specific Tasks
- Establish household and community knowledge, attitudes, beliefs and practices in relation to Tuberculosis; identify barriers to behaviour change
- Establish health workers' knowledge, attitudes and practices towards Tuberculosis control

- Establish the role community leaders i.e. (i.e. religious, cultural, opinion and political leaders) in Tuberculosis control.
- Identify existing channels, sources and mechanisms of communication and access to information about Tuberculosis control.
- Highlight key areas of focus to be addressed by the communication strategy.
- Recommend appropriate channels of disseminating information about TB.

Geographical coverage

The study will be conducted in all regions of the country including the following districts:

Central:	Kampala, Mukono, Kiboga
Northern:	Apac, Arua
South Western:	Rakai
Western:	Kyenjojo, Hoima
Eastern	Mbale, Soroti

Duration of the study

Two weeks: One week field work; one week analysis and report writing

Deliverables

1. Draft Research questionnaire
2. Revised Research questionnaire with pre-test comments
3. Draft report
4. Final Report and Power Point Presentation of the findings

Dates

Submit a technical and financial proposal to CDFU, Plot 42 Lumumba Avenue, P.O. Box 8734, Kampala. Mark the envelope: TB Research. Indicate the methodology you will use for the research.

Closing date for Questions: Wedn March 16, 2005
Closing date for Responses: Friday March 18, 2005

Contact

Stella Watya
CDFU
Tel: 031-263941/2
077-413801

TB Qualitative Survey

Exit Questionnaire for Clients

Introduction

My name is …….. and I am from Communication for Development Foundation Uganda (CDFU). The Ministry of Health (MoH) the National Tuberculosis (TB)/ Leprosy Programme (NTLP) implements activities aimed at achieving 70% detection rate and 85% treatment success rate by 2005. In 1997, NTLP adopted the World Health Organization (WHO) Directly Observed Therapy Short Course (DOTS) strategy with aim of ensuring high cure rates of TB patients, curtail the spread of the disease and prevent multi-drug resistance to TB.

CDFU has been commissioned by Management Sciences in Health Inc. (MSH) and funded by United States Agency for International Development (USAID) and MOH NLTP to conduct this survey. This survey is voluntary and we will keep the information you provide confidential. We are looking at factors that influence treatment in 10 selected districts of Uganda and your district was one of the few selected.

We would like you to provide us with basic information about those factors that influence this behavior. Opinions of practitioners as well as factual data will be sought. For this reason, respondents' names will remain anonymous and confidential.

Name of Respondent: (optional)										
Gender of respondent:				01 = Male				02= Female		
Questionnaire No.									**For Official Use ONLY**	
District										
Sub-county										
Village										
Date of the Interview:										
Interviewer's Initials:				Comments:						

1.	Age of Respondent?				
2	Marital Status of respondent?	(1) = Single (2) = Married (3) = Widowed (4)= Separated			
3.	Household size Total:	Number of Males:		No of Females	
		Number of adults (18yrs and above)		No. Of children (Below 18yrs)	
4.	Level of formal education for HH head?	01= Primary level 02 ="O" Level 03= "A" Level 04= Tertiary Education 05= No formal education. 06= Don't Know			
5	What is the Main Source (s) of Income (*multiple)*	01= salaried employment 02= Casual labour 03= self employed/businessman/woman 04= Peasants 05= Other (specify) _____			

6.	What do you know about TB: a) Spread i) …… ii)…… iii)…… iv)…….. b) signs and symptoms i) …… ii)…… iii)…… iv)…….. c) treatment i) …… ii)…… iii)…… iv)……..
6.1	What was your sources of information about TB 01= Radio 02= Health worker 03= Family member 04= Printed material 05= Other (specify)
7	How did you come to suspect you had TB before the TB test? *(Tick the appropriate)* 1. HIV/AIDS Counselling and testing 3. Referred by h/worker 2. Knowledge about signs & symptoms 4. Health Education 5. Family member 6. Other (specify)
8.	When you come to receive treatment, what other ***a) Health related issues have you been educated about?*** Frequency i) …… ii)…… iii)…… iv)…….. ***b) Other support?*** Frequency i) ……

	ii)…… iii)…… iv)……

9	Have you ever stopped treatment at any time?	01=Yes 02=No
9.1	If Yes, why did you stop i) …… ii)…… iii)……	
9.2	Do you know any other person who stopped treatment? 01= Yes 02= No If No, skip to the next question i) If Yes, why i) …… ii)…… iii)…… iv)…… ii) If no, why do you think other people may not come for or default on treatment? i) …… ii)…… iii)…… iv)……	
9.3	What happens if: - one delays to go for TB treatment - one does not complete treatment	

10	What problems do you face which may affect completion of the treatment course i) …… ii)…… iii)……		
10.1	What can help: a) to get more people with TB infection testing for TB? b) more people completing TB treatment?		
11.	Are there other services that have been offered at the treatment facility?	01=Yes	02 = No
11.1	If Yes, please list them i) …… ii)…… iii)…… iv)……		
12.	What do you think about the effectiveness and usefulness of the following in management of TB?		

12.1	Health Workers	i) …… ii)…… iii)……
12.2	Volunteers	i) …… ii)…… iii)……
12.3		
	Family members	i) …… ii)…… iii)……

13.	What other information about TB would you like to receive? …… …… …… ……
13.1	Through what sources? …… …… …… ……

This is the end our interview and Thanks for your cooperation

TB Qualitative Survey

Questionnaire for HW/Personnel at H/C

Introduction

My name is ……. and I am from Communication for Development Foundation Uganda (CDFU). The Ministry of Health (MoH) the National Tuberculosis (TB)/ Leprosy Programme (NTLP) implements activities aimed at achieving 70% detection rate and 85% treatment success rate by 2005. In 1997, NTLP adopted the World Health Organization (WHO) Directly Observed Therapy Short Course (DOTS) strategy with aim of ensuring high cure rates of TB patients, curtail the spread of the disease and prevent multi-drug resistance to TB.

CDFU has been commissioned by Management Sciences in Health Inc. (MSH) and funded by United States Agency for International development (USAID) and MOH NLTP to conduct this survey. This survey is voluntary and we will keep the information you provide confidential. We are looking at factors that influence treatment in 10 selected districts of Uganda and your district was one of the few selected.

We would like you to provide us with basic information about those factors that influence this behavior. Opinions of practitioners as well as factual data will be sought. For this reason, respondents' names will remain anonymous and confidential.

Name of Respondent: (optional)										
Questionnaire No.									**For Official Use ONLY**	
District										
Sub-county										
Name of Health Facility									Level/Type of Health centre	
Date of the Interview:										
Interviewers Initial:				Comments:						

1.	Qualification of respondent	Qualification	Awarding body
2.	Designation/Title of Respondent		
3.	Have you had training and refresher courses in TB? *(Tick the appropriate)*		01= Yes 02= No

4.	If yes, give details of the refresher courses you have undertaken.				
	Year	***Title of the refresher Course***	***Organiser***	***Duration***	***Rating***

RATING*: Read the statement below and choose one that best fits your evaluation of the training/refresher course listed above*

1. *training was very relevant to my work and has helped me improve performance*
2. *Training was relevant to my needs as a health worker but the quality of training did not meet my expectation*
3. *training was irrelevant to my needs as Health worker*

5.	What do you know about DOTS? (*listen and tick any of the following in case it is mentioned)* *A) Direct Observation: that swallowing of the drug should be observed daily* *B) Adherence: that observation of adherence for at least 3 times per week* *C)Course of Drug: - start 4 daily for first 2 months* *- 2 for the next 4- 6 months depending on the combination.* *D) Duration of treatment: at least 6-8 months depending on the combination* *E) Lab monitoring: - Lab tests* *- 1 at start* *- 2 months later* *- 1 at end of course*

<table>
<tr><td>6.</td><td>Does the health centre have schedules for community mobilization for early TB screening?
If yes, specify the activities

<table><tr><td>ACTIVITY</td><td>SCHEDULE</td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></td></tr>
<tr><td>6.1</td><td>What problems hinder:
TB Case detection
a) at health centre

b) at the community level</td></tr>
<tr><td>6.2</td><td>Compliance/Treatment</td></tr>
<tr><td>7.</td><td>What can help to improve:

<u>a) Case detection</u>
i) ……
ii)……
iii)……
iv)……..
v)……..</td></tr>
</table>

	b) Treatment i) …… ii)…… iii)…… iv)……
8.	How do you educate patients about TB?
9.	How do you educate the community on/about TB?

Method used	***Frequency***	***Codes***
1. 2. 3. 4.		01= weekly 02= fortnightly 03= monthly 04= quarterly

10.	What myths and misconceptions surround TB in this area with regard to a) Causes of TB …….. …….. …….. b) Spread of TB …….. …….. …….. c) Treatment of TB …….. …….. ……..
11.	In your view, what could be done to: *a) Improve patients' compliance to treatment* i) …….. ii)…….. iii)…… *b) Improve Case detection*

	i) …….. ii)…….. iii)……. *c) Improve DOTS coverage* i) …….. ii)…….. iii)…….		
12.	Are there other related services that are offered to the patients & the community at the health facility?	01=Yes	02 = No
12.1	If Yes, which services		

SERVICE	***Tick where applicable***
1. Health Education	
2. HIV counselling	
3.HIV Testing	
4. HIV Treatment	
5. Hygiene education	
6. Nutrition Education	
7. Lab Services	
8. Immunization	
9. Other (Specify)	

13.	*In your opinion, what socio-economic factors affect patients' response to TB treatment?* *(Treatment seeking)*	
	Socio-economic	i) …… ii)…… iii)…… iv)……
	Other factors(name them)	i) …… ii)…… iii)……
14.	What is channels do you think are appropriate for educating about TB?	

15.	What other information about TB do you want to receive?

This is the end our interview and Thanks for your cooperation

-TB Qualitative Survey

Questionnaire for Volunteers

Introduction

My name is …… and I am from Communication for Development Foundation Uganda (CDFU). The Ministry of Health (MoH) the National Tuberculosis (TB)/ Leprosy Programme (NTLP) implements activities aimed at achieving 70% detection rate and 85% treatment success rate by 2005. In 1997, NTLP adopted the World Health Organization (WHO) Directly Observed Therapy Short Course (DOTS) strategy with aim of ensuring high cure rates of TB patients, curtail the spread of the disease and prevent multi-drug resistance to TB.

CDFU has been commissioned by Management Sciences in Health Inc. (MSH) and funded by United States Agency for International development (USAID) and MOH NLTP to conduct this survey. This survey is voluntary and we will keep the information you provide confidential. We are looking at factors that influence treatment in 10 selected districts of Uganda and your district was one of the few selected.

We would like you to provide us with basic information about those factors that influence this behavior. Opinions of practitioners as well as factual data will be sought. For this reason, respondents' names will remain anonymous and confidential.

Name of Respondent: (optional)										
Gender of respondent								01=Male		02=Female
Questionnaire No.									**For Official Use ONLY**	
District										
Sub-county								Parish		
Date of the Interview:										
Interviewers Initial:								Comments:		

1.	Age of respondent	
2.	Level of education	01= Primary level 02 ="O" Level Cert 03= "A" Level Cert 04= Tertiary Education 05= No formal education. 06= Don't Know
3.	Have you had training in TB? *(Tick the appropriate)*	01= Yes 02= No
4.	What kind of training on TB have you received?	

5.	What do you know about the spread of TB? - Signs and symptoms - TB treatment?
6.	What was your source of information on TB?
7.	Other than patient care, what TB control activities are you involved in?
8.	In your view, what problems affect: *i) TB Case detection* a) at the community level b) health centre

	ii) Treatment seeking *iii) Compliance to treatment*	
9.	What do you think about the effectiveness and usefulness of the following in management of TB?	
	1. Health Workers	i) …… ii)…… iii)……
	2. Family members	i) …… ii)…… iii)……
10.	What myths and misconceptions surround TB in this area with regard to a) Causes of TB …….. …….. …….. b) Spread of TB …….. …….. …….. c) Treatment of TB …….. …….. ……..	

11.	In your view, what could be done to: *a) Improve Case detection* i) …….. ii)…….. iii)……. *b) Treatment seeking behaviour* i) …….. ii)…….. iii)……. *c) Improve patients' compliance to treatment* i) …….. ii)…….. iii)……. *d) Improve DOTS coverage* i) …….. ii)…….. iii)…….
12.	What channels do you think are appropriate for educating about TB?
13.	What other information about TB do you want to receive?

14.	How can TB control in this community be improved?

This is the end our interview and Thanks for your cooperation

TB Qualitative Survey

FGD GUIDE for Community

Categories & Criteria for Selection(both male & female)

- Patients' families
- Community leaders
- LC I secretary for health
- LCII chairman or representative
- Recovered patient
- Neighbour
- Partner representatives if any

Total = 12 people per sub-county

Interview Objectives

- Collect information on:
  a) Case detection
  b) Treatment success
  c) DOTS coverage
- Identify the availability of service providers in communities
  i) Motivators and challenges for volunteers
- Information dissemination activities in place
- Motivating factors to going for TB detection, completing treatment

Expected Results

- Success stories for TB control
- Why the targets have not been met
- Identify issues to be addressed by communication

Introductory Information:			
District			
Sub-county			
Total Attendance		Men =	Women =

1. Introductions

Introduction

My name is …… and my colleague is …… we are from Communication for Development Foundation Uganda (CDFU). The Ministry of Health (MoH) the National Tuberculosis (TB)/ Leprosy Programme (NTLP) implements activities aimed at achieving 70% detection rate and 85% treatment success rate by 2005. In 1997, NTLP adopted the World Health Organization (WHO) Directly Observed Therapy Short Course (DOTS) strategy with aim of ensuring high cure rates of TB patients, curtail the spread of the disease and prevent multi-drug resistance to TB.

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this survey. This survey is voluntary and we will keep the information you provide confidential. We are looking at factors that influence treatment in 10 selected districts of Uganda and your district was one of the few selected.

We would like you to provide us with basic information about those factors that influence this behavior. Opinions of practitioners as well as factual data will be sought. For this reason, respondents' names will remain anonymous and confidential.

- *Ask participants to introduce themselves; introductions should include: Name, village from & kind of work done*

2. Introduce purpose of why you are there in brief for their benefit.
3. Assure them of the importance of their contribution to the welfare of the people in the area

Establish Current Status	**Gaps**
What do you know about TB: a) spread i) …… ii)…… iii)…… iv)…….. b) signs and symptoms i) …… ii)…… iii)…… iv)…….. c) treatment i) …… ii)…… iii)…… iv)……..	

What was your sources of information about TB 01= Radio 02= Health worker 03= Family member 04= Printed material 05= Other (specify)	
How do people in this area come to suspect they have TB and therefore go for the TB test?	
What do you do as a community help people to: - know about TB - go for TB test - treat TB properly	
What do you think is the general perception of the community towards TB patients?	
What problems do TB patients in this community face?	
What problems do TB volunteers in this community face?	
Why do some people who suspect they are infected with TB refrain from TB testing? What do you think would help to encourage these people to test for TB?	
Why do some TB patients fail to complete treatment? What do you think would help to encourage these people to complete treatment?	
What other information about TB would you like to receive? Through what sources?	

TB Qualitative Survey

KEY INFORMANT'S INTERVIEW GUIDE

Categories of Key informants in the districts

1. DDHS
2. District Health Educator
3. District TB & Leprosy Supervisor
4. Secretary for Health/Social Services
5. Representative from partner organisation if any.

Interview Objectives

a) collect information on the range of available services in the district

b) determine the extent to which the available services have attained the intended goal

c) assess the effectiveness of existing information dissemination activities with regard to the success of the programme

d) identify the channels of communication

Expected Results

i) Accessibility & availability of TB services

ii) Coverage of DOTS in the district

iii) Identified problems that hinder the programme success

iv) Recommended IEC channels that will lead to a successful intervention

- No. of health centres in the district/county/sub-county
- DOTS coverage in the district
    - How many offer TB care services?
    - How many volunteers? How many sub counties participating in DOTS programme?
    - Any records? Performance by way of detection, treatment success (statistics from data).
- Availability of voluntary DOTS providers?
    - Motivators/influencers for volunteers
    - Challenges for volunteers if any
    - IEC interventions/TB promotional activities in the district.
- Any community based TB initiatives
- The National targets for TB control are 70% case detection and 85% treatment success. Uganda including your district has not achieved these. What are the problems in your district for:
    - Case detection
    - Treatment success (compliance and completion of treatment)?
    - What are the challenges for DOTS?
- (opinion) In your view, what could be done to:
        - Improve compliance to treatment
        - Increase the number of patients who go for the TB test
        - Expand DOTS
- How is information about TB disseminated?
- What are the challenges?
- What is the best way of disseminating such information?
- What kind of support from leaders have you received towards TB control in the district?

Who are the partners in TB control in the district? If available, name them.

Name	***Type of involvement***
1.	
2.	
3.	
4.	

	NAME	TITLE	DISTRICT	CONTACT
1	Mr. Sabiiti	DDHS	Apac	
2		LC V Secretary for Health	Apac	
3	Ms Elly Roset Ogang	TB and Leprosy Supervisor	Apac	
4	Mr. Paul Odong	i/c CBOs	Apac	
			Arua	
5			Arua	
6	Mr. Bosco Orec	District Health Educator	Arua	
7			Arua	
8		TB and Leprosy Supervisor	Kampala	
9		District Health Educator	Kampala	
10				
11	Dr. Susan Wandera	DDHS	Mukono	
12	Mr. Kimula	District TB and Leprosy Supervisor	Mukono	
13	Mr. Martin Amodoi	District Health Educator	Soroti	
14	Mrs. Mary Anero	LC V Secretary for Health & social Services	Soroti	
15	Mr. Nelson Okello	District TB and Leprosy Supervisor	Soroti	
16	Dr. Ariyonga	Assist. DDHS	Hoima	
17	Ms Hannah Nyamururwa	LC V Secretary for Health & social Services	Hoima	
18	Mr. Moses Asumbusa	District TB and Leprosy Supervisor	Hoima	
19	Mr. Augustine Muhumuza	District Health Educator	Hoima	
20	Dr. Allan Niyonzima	DDHS	Kiboga	
21	Mr. Dawson Isabirye	District TB and Leprosy Supervisor	Kiboga	
22				
23			Rakai	
24			Rakai	
25			Rakai	
26			Rakai	
27			Kiboga	
28			Kiboga	
29			Kiboga	
30			Kiboga	
31			Mbale	
32			Mbale	
33			Mbale	
34			Mbale	
35				

Focus Group Discussions (FGDs)

APAC District **1. Minakulu Sub county** **2. Aber Sub-county at Aber**
Arua District **1.** **2.**
Mukono District **1. Kasawo Sub county** **2. Nakifuma Sub county**
Kampala District **1. Mbuya Outreach** **2. Kawempe Health centre (Non-DOTS)**
Kiboga District **1.** **2.**
Rakai District **1. Lwankoni Sub-county** **2. Bukunda Health centre (…. Sub-county)**
Hoima District **1. Busisi Sub-county** **2. Kitoba Sub county**
Kyenjojo District **1.** **2.**
Mbale District **1.** **2.**
Soroti District **1. Eastern Division – Cell E** **2. Northern Division**